What is claimed is:

1. A wireless apparatus comprising:

a forward error correction (FEC) coder to encode digital data using a low density parity check (LDPC) code, said FEC coder including:

a matrix multiplication unit to multiply input data by a transpose of a first portion of a parity check matrix to generate modified data;

a differential encoder to differentially encode said modified data to generate coded data; and

a concatenation unit to concatenate the input data and the coded data to form a code word; and

a wireless transmitter to transmit a wireless signal that includes said code word.

2. The wireless apparatus of claim 1, wherein:

said wireless signal is an orthogonal frequency division multiplexing (OFDM) signal.

3. The wireless apparatus of claim 1, further comprising:

a mapper, between said FEC coder and said wirelews transmitter, to map said code word based on a predetermined modulation scheme; and

an inverse discrete Fourier transform unit to convert mapped data from a frequency domain representation to a time domain representation.

4. The wireless apparatus of claim 1, wherein:

said parity check matrix is substantially as described in the list file of Appendix A.

5. The wireless apparatus of claim 1, wherein:

said parity check matrix is the same as the matrix described in the list file of Appendix A.

6. The wireless apparatus of claim 1, further comprising:

a storage medium to store a representation of at least said first portion of said parity check matrix for use by said matrix multiplication unit.

7. The wireless apparatus of claim 6, wherein:

said storage medium is operative to store a representation of the entire parity check matrix.

8. The wireless apparatus of claim 6, wherein:

said storage medium is operative to store a matrix that is substantially as described in the list file of Appendix A.

9. The wireless apparatus of claim 6, wherein:

said storage medium is operative to store a matrix that is a portion of a matrix that is substantially as described in the list file of Appendix A, said portion of said matrix being a portion having columns of weight 4.

10. The wireless apparatus of claim 1, wherein:

said LDPC code is a (2000, 1600) bit-length code.

11. The wireless apparatus of claim 1, wherein:

said wireless apparatus is a wireless user device for use in a wireless network.

12. The wireless apparatus of claim 1, wherein:

said wireless apparatus is a wireless access point.

13. The wireless apparatus of claim 1, wherein:

said wireless apparatus is a wireless network interface module.

14. The wireless apparatus of claim 1, wherein:

said wireless apparatus is an integrated circuit.

15. A method comprising:

matrix multiplying input data by a transpose of a first portion of a parity check matrix;

processing a result of said matrix multiplication using differential encoding to generate coded data;

concatenating said input data and said coded data to form a code word; and

generating and transmitting a wireless signal that includes said code word.

16. The method of claim 15, wherein:

said wireless signal is an orthogonal frequency division multiplexing (OFDM) signal.

17. The method of claim 15, further comprising:

accessing a storage medium storing a representation of at least a portion of said parity check matrix before matrix multiplying.

18. The method of claim 15, wherein:

said parity check matrix is substantially as described in the list file of Appendix A.

19. The method of claim 15, wherein:

said parity check matrix is the same as the matrix described in the list file of Appendix A.

20. The method of claim 15, wherein:

said parity check matrix defines a (2000, 1600) bit-length LDPC code.

21. The method of claim 15, wherein:

generating and transmitting a wireless signal includes mapping said code word into modulation symbols and processing said modulation symbols using an inverse discrete Fourier transform.

22. An article comprising a machine readable storage medium having a representation of at least a portion of a parity check matrix stored thereon, said parity check matrix being substantially as described in the list file of Appendix A.

23. The article of claim 22, wherein:

said machine readable storage medium has a representation of the entire parity check matrix stored thereon.

24. The article of claim 22, wherein:

said machine readable storage medium has a portion of said parity check matrix stored thereon that includes all columns of weight 4.

25. The article of claim 22, wherein:

said parity check matrix is the same as the matrix described in the list file of Appendix A.

26. The article of claim 22, wherein:

said parity check matrix defines a (2000, 1600) bit-length LDPC code.

27. The article of claim 22, wherein:

said article includes a wireless communication device.

28. The article of claim 22, wherein:

said article comprises only said machine readable storage medium.

29. The article of claim 22, wherein:

said machine readable storage medium comprises at least one of the following: a semiconductor memory, a read only memory (ROM), a random access memory (RAM), an erasable programmable read only memory (EPROM), an electrically erasable programmable read only memory (EEPROM), a flash memory, a magnetic card, an optical card, a magnetic disk, an optical disk, a CD-ROM, and a magneto-optical disk.

30. A system comprising:

a forward error correction (FEC) coder to encode digital data using a low density parity check (LDPC) code, said FEC coder including:

a matrix multiplication unit to multiply input data by a transpose of a first portion of a parity check matrix to generate modified data;

a differential encoder to differentially encode said modified data to generate coded data; and

a concatenation unit to concatenate the input data and the coded data to form a code word;

a wireless transmitter to transmit a wireless signal that includes said code word; and

at least one dipole antenna coupled to said wireless transmitter to facilitate transmission of said wireless signal.

31. The system of claim 30, wherein:

said wireless signal is an orthogonal frequency division multiplexing (OFDM) signal.

32. The system of claim 30, further comprising:

a storage medium to store a representation of at least said first portion of said parity check matrix for use by said matrix multiplication unit.

33. The system of claim 30, wherein:

said parity check matrix is substantially as described in the list file of Appendix A.

34. An article comprising a storage medium having instructions stored thereon that, when executed by a computing platform, operate to:

matrix multiply input data by a transpose of a first portion of a parity check matrix;

process a result of said matrix multiplication using differential encoding to generate coded data;

concatenate said input data and said coded data to form a code word; and

generate and transmit a wireless signal that includes said code word.

35. The article of claim 34, wherein:

said wireless signal is an orthogonal frequency division multiplexing (OFDM) signal.

36. The article of claim 34, wherein said instructions, when executed by the computing platform, further operate to:

access a storage medium having at least a portion of said parity check matrix stored thereon before matrix multiplying.

37. The article of claim 34, wherein:

said parity check matrix is substantially as described in the list file of Appendix A.

38. The article of claim 34, wherein:

said parity check matrix defines a (2000, 1600) bit-length LDPC code.